

Amendments to the Claims:

Claims 1-46 (canceled)

Claim 47 (original): A method of remotely testing emissions of a vehicle, comprising:

(a) wirelessly receiving, by a computer system and from a vehicle, data comprising at least one of (i) at least one vehicle diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag;

(b) analyzing the received data to determine a status of the vehicle's emissions;

(c) repeating the wirelessly receiving and analyzing while the vehicle is in use;

(d) outputting information indicative of the determined status of the vehicle's emissions;

(e) storing at least a portion of the received data in a database;

(f) wirelessly receiving GPS data from the vehicle; and

(g) providing at least one webpage with access to emissions testing software,

wherein the vehicle is at a location remote from an emissions testing entity,

wherein the repeating includes determining whether the vehicle's emissions are compliant with at least one predetermined emissions criterion,

wherein the repeating includes monitoring the data relating to the at least one I/M readiness flag, wherein the monitoring is authorized by a user,

wherein outputting information includes sending an electronic text, data, or voice message to a computer, cellular telephone, or wireless device,

wherein outputting information includes displaying information on at least one webpage,

wherein outputting information includes notifying an entity when the vehicle's emissions are not compliant with at least one test criterion,

wherein outputting information includes providing information concerning the vehicle's emissions to at least one entity, wherein the at least one entity comprises a governmental or nongovernmental organization or a user, and

wherein analyzing the received data includes:

- (i) determining if one or more DTCs are present among the received data;
- (ii) determining the status of the MIL; and
- (iii) determining a status of the at least one I/M readiness flag.

Claims 48-57 (canceled)

Claim 58 (currently amended): ~~The method of claim 2,~~A method of remotely testing emissions of a vehicle, comprising:

(a) wirelessly receiving, by a computer system and from a vehicle, data comprising at least one of (i) at least one vehicle diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag;

(b) analyzing the received data to determine a status of the vehicle's emissions;

(c) repeating the wirelessly receiving and analyzing while the vehicle is in use, wherein the repeating is stopped when a predetermined set of readiness flags are characterized by a complete condition; and

(d) outputting information indicative of the determined status of the vehicle's emissions.

Claim 59 (currently amended): ~~The method of claim 2,~~A method of remotely testing emissions of a vehicle, comprising:

(a) wirelessly receiving, by a computer system and from a vehicle, data comprising at least one of (i) at least one vehicle diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag;

(b) analyzing the received data to determine a status of the vehicle's emissions, wherein analyzing the received data includes:

(i) determining if one or more DTCs are present among the received data;

(ii) determining the status of the MIL; and

(iii) determining a status of the at least one I/M readiness flag;

(c) repeating the wirelessly receiving and analyzing while the vehicle is in use; and

(d) outputting information indicative of the determined status of the vehicle's emissions.

Claim 60 (currently amended): The method of claim ~~13~~59, wherein analyzing the received data further includes determining whether a user passes or does not pass an emissions test.

Claim 61 (currently amended): The method of claim ~~14~~60, wherein the data relating to the at least one I/M readiness flag describes a status of the flag.

Claim 62 (currently amended): The method of claim ~~15~~61, wherein analyzing the received data further includes determining if the at least one I/M readiness flag is characterized by at least one of a complete condition, an incomplete condition, a not available condition, and a

not supported condition.

Claim 63 (currently amended): The method of claim ~~1662~~, wherein the vehicle is determined to not pass an emissions test if more than two I/M readiness flags are characterized by an incomplete condition.

Claim 64 (currently amended): The method of claim ~~1359~~, wherein the vehicle is determined to not pass an emissions test if at least one DTC is present among the received data.

Claim 65 (currently amended): The method of claim ~~1359~~, wherein the vehicle is determined to not pass an emissions test if the MIL status is characterized by an on condition.

Claim 66 (currently amended): The method of claim ~~1359~~, wherein the vehicle is determined to pass an emissions test if no DTCs are present among the received data.

Claim 67 (currently amended): The method of claim ~~1359~~, wherein the vehicle is determined to pass an emissions test if the MIL status is characterized by an off condition and a predetermined set of supported I/M readiness flags are characterized by a complete condition.

Claim 68 (currently amended): The method of claim ~~1359~~, wherein the vehicle is determined to not pass an emissions test if the MIL status is characterized by an off condition and a predetermined set of supported I/M readiness flags are characterized by an incomplete condition.

Claim 69 (currently amended): The method of claim ~~1359~~, wherein the vehicle is determined to pass an emissions test if the MIL status is characterized by an off condition and no more than two of a predetermined set of supported I/M readiness flags are characterized by an incomplete condition.

Claim 70 (currently amended): The method of claim ~~1359~~, wherein the vehicle is determined to pass an emissions test if the MIL status is characterized by an off condition, the vehicle has no DTCs, and all supported I/M readiness flags are characterized by a complete condition.

Claims 71-77 (cancelled)

Claim 78 (currently amended): ~~The method of claim 2, further comprising~~ A method of remotely testing emissions of a vehicle, comprising:

(a) wirelessly receiving, by a computer system and from a vehicle, data comprising at least one of (i) at least one vehicle diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag;

(b) analyzing the received data to determine a status of the vehicle's emissions;

(c) repeating the wirelessly receiving and analyzing while the vehicle is in use;

(d) outputting information indicative of the determined status of the vehicle's emissions; and

(e) wirelessly transmitting a schema configured to adjust a transmission frequency in the vehicle.

Claim 79 (currently amended): ~~The method of claim 2, further comprising~~ A method of remotely testing emissions of a vehicle, comprising:

(a) wirelessly receiving, by a computer system and from a vehicle, data comprising at least one of (i) at least one vehicle diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag;

(b) analyzing the received data to determine a status of the vehicle's emissions;

(c) repeating the wirelessly receiving and analyzing while the vehicle is in use;

(d) outputting information indicative of the determined status of the vehicle's emissions; and

(e) providing at least one webpage with access to emissions testing software.

Claims 80-85 (cancelled)

Claim 86 (currently amended): ~~The method of claim 2, further comprising~~A method of remotely testing emissions of a vehicle, comprising:

(a) wirelessly receiving, by a computer system and from a vehicle, data comprising at least one of (i) at least one vehicle diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag;

(b) analyzing the received data to determine a status of the vehicle's emissions;

(c) repeating the wirelessly receiving and analyzing while the vehicle is in use;

(d) outputting information indicative of the determined status of the vehicle's emissions; and

(e) sending at least a portion of the received data to an entity for analysis.

Claim 87 (original): A method of remotely testing a vehicle's emissions, comprising:

(a) generating, in a vehicle, data comprising at least one of (i) at least one vehicle diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag;

- (b) transferring the data to a wireless appliance comprising,
 - (i) a microprocessor, and
 - (ii) a wireless transmitter interfaced with the microprocessor;
- (c) wirelessly transmitting the data with the wireless transmitter; and
- (d) repeating the generating, transferring, and transmitting while the vehicle is in use,

wherein the generating further includes generating a status of at least one of the following I/M readiness tests: (i) misfire monitoring; (ii) fuel systems monitoring; (iii) comprehensive component monitoring; (iv) catalyst monitoring; (v) evaporative system monitoring; (vi) oxygen sensor monitoring; (vii) oxygen sensor heater monitoring; and (viii) exhaust gas recirculator system monitoring,

wherein the generating further includes generating a status of each of tests (i) through (viii) that are supported by the vehicle,

wherein the generating further includes monitoring an engine computer in the vehicle to generate the data comprising at least one of (i) at least one vehicle DTC, (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag, and

wherein the data is transferred to the wireless appliance until the wireless appliance receives at least one instruction to stop the transferring.

Claim 88 (cancelled)

Claim 89 (currently amended): ~~The method of claim 42,~~ A method of remotely testing a vehicle's emissions, comprising:

- (a) generating, in a vehicle, data comprising at least one of (i) at least one vehicle

diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag, wherein the generating further includes generating a status of at least one of the following I/M readiness tests: (i) misfire monitoring; (ii) fuel systems monitoring; (iii) comprehensive component monitoring; (iv) catalyst monitoring; (v) evaporative system monitoring; (vi) oxygen sensor monitoring; (vii) oxygen sensor heater monitoring; and (viii) exhaust gas recirculator system monitoring;

(b) transferring the data to a wireless appliance comprising,

(i) a microprocessor, and

(ii) a wireless transmitter interfaced with the microprocessor;

(c) wirelessly transmitting the data with the wireless transmitter; and

(d) repeating the generating, transferring, and transmitting while the vehicle is in use.

Claim 90 (currently amended): The method of claim 43~~89~~, wherein the generating further includes generating a status of each of tests (i) through (viii) that are supported by the vehicle.

Claims 91-92 (cancelled)

Claim 93 (currently amended): ~~The method of claim 45,~~A method of remotely testing a vehicle's emissions, comprising:

(a) generating, in a vehicle, data comprising at least one of (i) at least one vehicle diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag, wherein the generating further includes monitoring an engine computer in the vehicle to generate the data comprising at least one of (i) at least one vehicle DTC, (ii) status of a

MIL, and (iii) data relating to at least one I/M readiness flag, wherein the monitoring ceases when the data relating to the I/M readiness flags indicates that no more than two flags supported in the vehicle are characterized by an incomplete condition;

(b) transferring the data to a wireless appliance comprising,

(i) a microprocessor, and

(ii) a wireless transmitter interfaced with the microprocessor;

(c) wirelessly transmitting the data with the wireless transmitter; and

(d) repeating the generating, transferring, and transmitting while the vehicle is in use.

Claim 94 (currently amended): The method of claim 4793, wherein the monitoring ceases when the data relating to the I/M readiness flags indicates that each flag supported in the vehicle is characterized by a complete condition.

Claims 95-99 (cancelled)

Claim 100 (currently amended): ~~The method of claim 52, further comprising~~ A method of remotely testing a vehicle's emissions, comprising:

(a) generating, in a vehicle, data comprising at least one of (i) at least one vehicle diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag;

(b) transferring the data to a wireless appliance comprising,

(i) a microprocessor, and

(ii) a wireless transmitter interfaced with the microprocessor;

(c) wirelessly transmitting the data with the wireless transmitter, wherein at least one of the generating and transmitting is performed at a configurable, predetermined, or random interval;

(d) repeating the generating, transferring, and transmitting while the vehicle is in use;
and

(e) wirelessly downloading a schema configured to change the interval.

Claim 101 (currently amended): A programmed apparatus, programmed to execute a method of remotely testing emissions of a vehicle, said method comprising:

(a) wirelessly receiving, by a computer system and from a vehicle, data comprising at least one of (i) at least one vehicle diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag;

(b) analyzing the received data to determine a status of the vehicle's emissions;

(c) repeating the wirelessly receiving and analyzing while the vehicle is in use;

(d) outputting information indicative of the determined status of the vehicle's emissions;

(e) storing at least a portion of the received data in a database;

(f) wirelessly receiving GPS data from the vehicle; and

(g) providing at least one webpage with access to emissions testing software,

wherein the vehicle is at a location remote from an emissions testing entity,

wherein the repeating includes determining whether the vehicle's emissions are compliant with at least one predetermined emissions criterion,

wherein the repeating includes monitoring the data relating to the at least one I/M readiness flag, wherein the monitoring is authorized by a user,

wherein outputting information includes sending an electronic text, data, or voice message to a computer, cellular telephone, or wireless device,

wherein outputting information includes displaying information on at least one webpage,

wherein outputting information includes notifying an entity when the vehicle's emissions are not compliant with at least one test criterion,

wherein outputting information includes providing information concerning the vehicle's emissions to at least one entity, wherein the at least one entity comprises a governmental or nongovernmental organization or a user, and

wherein analyzing the received data includes:

- (i) determining if one or more DTCs are present among the received data;
- (ii) determining the status of the MIL; and
- (iii) determining a status of the at least one I/M readiness flag.

Claims 102-106 (cancelled)

Claim 107 (currently amended): ~~The programmed apparatus of claim 56,~~ A programmed apparatus, programmed to execute a method of remotely testing emissions of a vehicle, said method comprising:

(a) wirelessly receiving, by a computer system and from a vehicle, data comprising at least one of (i) at least one vehicle diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag;

- (b) analyzing the received data to determine a status of the vehicle's emissions;
- (c) repeating the wirelessly receiving and analyzing while the vehicle is in use,
wherein the repeating is stopped when a predetermined set of readiness flags are characterized by
a complete condition; and
- (d) outputting information indicative of the determined status of the vehicle's
emissions.

Claim 108 (currently amended): ~~The programmed apparatus of claim 56;~~ A programmed apparatus, programmed to execute a method of remotely testing emissions of a vehicle, said method comprising:

- (a) wirelessly receiving, by a computer system and from a vehicle, data comprising at least one of (i) at least one vehicle diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag;
- (b) analyzing the received data to determine a status of the vehicle's emissions,
wherein analyzing the received data includes:
 - (i) determining if one or more DTCs are present among the received data;
 - (ii) determining the status of the MIL; and
 - (iii) determining a status of the at least one I/M readiness flag;
- (c) repeating the wirelessly receiving and analyzing while the vehicle is in use; and
- (d) outputting information indicative of the determined status of the vehicle's
emissions.

Claim 109 (currently amended): The programmed apparatus of claim ~~62~~108, wherein analyzing the received data further includes determining whether a user passes or does not pass an emissions test.

Claim 110 (currently amended): The programmed apparatus of claim ~~63~~109, wherein the data relating to the at least one I/M readiness flag describes a status of the flag.

Claim 111 (currently amended): The programmed apparatus of claim ~~64~~110, wherein analyzing the received data further includes determining if the at least one I/M readiness flag is characterized by at least one of a complete condition, an incomplete condition, a not available condition, and a not supported condition.

Claims 112-116 (cancelled)

Claim 117 (currently amended): A programmed apparatus, programmed to execute a method of remotely testing a vehicle's emissions, said method comprising:

(a) generating, in a vehicle, data comprising at least one of (i) at least one vehicle diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag;

(b) transferring the data to a wireless appliance comprising,

(i) a microprocessor, and

(ii) a wireless transmitter interfaced with the microprocessor;

(c) wirelessly transmitting the data with the wireless transmitter; and

(d) repeating the generating, transferring, and transmitting while the vehicle is in use,

wherein the generating further includes generating a status of at least one of the following I/M readiness tests: (i) misfire monitoring; (ii) fuel systems monitoring; (iii) comprehensive

component monitoring; (iv) catalyst monitoring; (v) evaporative system monitoring; (vi) oxygen sensor monitoring; (vii) oxygen sensor heater monitoring; and (viii) exhaust gas recirculator system monitoring,

wherein the generating further includes generating a status of each of tests (i) through (viii) that are supported by the vehicle,

wherein the generating further includes monitoring an engine computer in the vehicle to generate the data comprising at least one of (i) at least one vehicle DTC, (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag, and

wherein the data is transferred to the wireless appliance until the wireless appliance receives at least one instruction to stop the transferring.

Claim 118 (cancelled)

Claim 119 (currently amended): ~~The programmed apparatus of claim 72,~~ A programmed apparatus, programmed to execute a method of remotely testing a vehicle's emissions, said method comprising:

(a) generating, in a vehicle, data comprising at least one of (i) at least one vehicle diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag, wherein the generating further includes generating a status of at least one of the following I/M readiness tests: (i) misfire monitoring; (ii) fuel systems monitoring; (iii) comprehensive component monitoring; (iv) catalyst monitoring; (v) evaporative system monitoring; (vi) oxygen sensor monitoring; (vii) oxygen sensor heater monitoring; and (viii) exhaust gas recirculator system monitoring;

(b) transferring the data to a wireless appliance comprising,

- (i) a microprocessor, and
- (ii) a wireless transmitter interfaced with the microprocessor;
- (c) wirelessly transmitting the data with the wireless transmitter; and
- (d) repeating the generating, transferring, and transmitting while the vehicle is in use.

Claim 120 (cancelled)

Claim 121 (currently amended): ~~The programmed apparatus of claim 74,~~ A programmed apparatus, programmed to execute a method of remotely testing a vehicle's emissions, said method comprising:

(a) generating, in a vehicle, data comprising at least one of (i) at least one vehicle diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag, wherein the generating further includes monitoring an engine computer in the vehicle to generate the data comprising at least one of (i) at least one vehicle DTC, (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag, wherein the monitoring ceases when the data relating to the I/M readiness flags indicates that no more than two flags supported in the vehicle are characterized by an incomplete condition;

- (b) transferring the data to a wireless appliance comprising,
 - (i) a microprocessor, and
 - (ii) a wireless transmitter interfaced with the microprocessor;
 - (c) wirelessly transmitting the data with the wireless transmitter; and
 - (d) repeating the generating, transferring, and transmitting while the vehicle is in use.

Claim 122 (currently amended): The programmed apparatus of claim ~~75~~121, wherein the monitoring ceases when the data relating to the I/M readiness flags indicates that each flag supported in the vehicle is characterized by a complete condition.

Claims 123-128 (cancelled)

Claim 129 (currently amended): ~~The machine-readable medium of claim 81,~~A machine-readable medium encoded with a plurality of processor-executable instructions for:

(a) wirelessly receiving, by a computer system and from a vehicle, data comprising at least one of (i) at least one vehicle diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag;

(b) analyzing the received data to determine a status of the vehicle's emissions, wherein analyzing the received data includes:

(i) determining if one or more DTCs are present among the received data;

(ii) determining the status of the MIL; and

(iii) determining a status of the at least one I/M readiness flag;

(c) repeating the wirelessly receiving and analyzing while the vehicle is in use; and

(d) outputting information indicative of the determined status of the vehicle's emissions.

Claims 130-132 (cancelled)

Claim 133 (currently amended): ~~The machine-readable medium of claim 86,~~A machine-readable medium encoded with a plurality of processor-executable instructions for:

(a) generating, in a vehicle, data comprising at least one of (i) at least one vehicle diagnostic trouble code (DTC), (ii) status of a MIL, and (iii) data relating to at least one I/M readiness flag, wherein the generating further includes generating a status of at least one of the following I/M readiness tests: (i) misfire monitoring; (ii) fuel systems monitoring; (iii) comprehensive component monitoring; (iv) catalyst monitoring; (v) evaporative system monitoring; (vi) oxygen sensor monitoring; (vii) oxygen sensor heater monitoring; and (viii) exhaust gas recirculator system monitoring;

(b) transferring the data to a wireless appliance comprising,

(i) a microprocessor, and

(ii) a wireless transmitter interfaced with the microprocessor;

(c) wirelessly transmitting the data with the wireless transmitter; and

(d) repeating the generating, transferring, and transmitting while the vehicle is in use.

Claims 134-138 (cancelled)

Claim 139 (currently amended): ~~The graphical user interface of claim 91,~~ A graphical user interface for displaying information associated with a remote emissions test of a vehicle, comprising:

a viewing device displaying a graphical user interface including,

(a) parameter information associated with a plurality of parameters monitored by the remote emissions test, wherein the parameters include I/M readiness test parameters; and

(b) status information reflecting at least one status of the remote emissions test.

Application Serial No.10/615,516

Docket No. 0307091.0158

Claims 140-144 (cancelled)